Recent ornithological literature from the Caribbean

A regular feature of the Journal of Caribbean Ornithology, this column alerts readers to recent ornithological literature from the Caribbean basin that has appeared elsewhere. We would also like to include any unpublished theses or other reports that may be difficult to find in more universally available abstract services. We invite readers of the Journal of Caribbean Ornithology to alert our compiler, Steven Latta, to other articles that should be highlighted in this section. Our hope is that by providing these summaries we will increase the exchange of knowledge among Caribbean ornithologists and conservationists.

—Steven C. Latta

National Aviary, Allegheny Commons West, Pittsburgh, PA 15212, USA; e-mail: steven.latta@aviary.org

Angelier, F., R.L. Holberton, and P.P. Marra. 2009. Does stress response predict return rate in a migratory bird species? A study of American redstarts and their non-breeding habitat. Proceedings of the Royal Society B 276:3545–3551.—The adrenocortical stress response of non-breeding American Redstarts (Setophaga ruticilla), wintering in habitats of either high (mangrove) or low suitability (scrub), was measured, and their return rate during the following non-breeding seasons was monitored. Results suggest that in a context-dependent manner, the ability of an individual to physiologically react to stress determines its ability of returning to its non-breeding territory the following winters. E-mail: fangelier@ucdavis.edu.


Beissinger, S.R., J.M. Wunderle, Jr., J.M. Meyers, B.-E. Sæther, and S. Engen. 2008. Anatomy of a bottleneck: diagnosing factors limiting population growth in the Puerto Rican Parrot. Ecological Monographs 78:185–203.—The role of genetic, demographic, environmental, and catastrophic processes in maintaining the Puerto Rican Parrot (Amazona vittata) in a prolonged bottleneck are investigated. Results suggest that four primary factors (reduced hatching success due to inbreeding, failure of adults to nest, nest failure due to non-genetic causes, and reduced survival of adults and juveniles) were responsible for maintaining the bottleneck. E-mail: jmwunderle@gmail.com.

Bibles, B.D., and C.W. Boal. 2012. Morphometric-based sexual determination of Bananaquits (Coereba flaveola). Ornithologia Neotropical 23:507–515.—Morphometric data of the Bananaquit were collected over 8 yrs on Guana Island, British Virgin Islands, to develop a predictive model based on logistic regression to assign adult Bananaquits to sex. This model classified 96% of validation individuals to the correct sex. E-mail: clint.boal@ttu.edu.

Bouchard, L.C., and M.J. Anderson. 2011. Caribbean Flamingo resting behavior and the influence of weather variables. Journal of Ornithology 152:307–312.—Observations of captive American Flamingos (Phoenicopterus ruber) sought to investigate the possible functions of unipedal and bipedal resting. Results suggested that flamingos rest on one leg for longer intervals in an attempt to conserve body heat, and that on windy days a bipedal stance is preferred to enhance stability. E-mail: mander06@sju.edu.


Brown, D.R., and T.W. Sherry. 2008. Alternative strategies of space use and response to resource change in a wintering migrant songbird. Behavioral Ecology 19:1314–1325.—Sedentary and floating behaviors were studied in a wintering population of the Ovenbird (Seiurus aurocapilla) in response to manipulated and natural variation in food availability in Jamaica. Results suggest that alternative behaviors represent a trade-off in response to resource availability. E-mail: david.brown@eku.edu.

Clark, C.J. 2011. Effects of tail length on an escape maneuver of the Red-billed Streamertail. Journal of Ornithology 152:397–408.—This study aimed to test whether experimental manipulation of tail length affected the kinematics of a low-speed escape maneuver in the Streamertail (Trochilus polytmus) of Jamaica. Experimental observations suggest that the greatly elongated tails of this species may not pose a large cost to low-speed maneuvering flight. E-mail: christopher.clark@yale.edu.


Dalsgaard, B. 2011. Nectar-feeding and pollination by the Cuban Green Woodpecker (Xiphidiopicus percutus) in the West Indies. Ornitologia Neotropical 22:447–451.—E-mail: b.dalsgaard@zoo.cam.ac.uk.


Migration of five Kirtland’s Warblers (Setophaga kirtlandii) was recorded by observing uniquely color-banded individuals at or near both the beginning and end of spring migration in the Bahamas and Michigan. Average duration of migration was 15.8 days (range 13–23 days) and the average distance traveled was 144.5 km/day (96.1–169.1 km/day). E-mail: dewert@tnc.org.

Gilardi, J. 2011. Raise...release...repeat. PsittaScene 23:3–5.—An accounting of the efforts to conserve the Puerto Rican Parrot, including captive breeding at the Luquillo Aviary in the ElYunque Rainforest, and at the Vivaldi (Rio Abajo) Aviary in the Rio Abajo Forest. As of the start of 2011 the wild population of parrots was 34–40 individuals in the Rio Abajo State Forest, and 20–30 in the Caribbean National Forest. The captive population is now 269 parrots, split evenly between both aviaries. E-mail: unavailable.

Gowda, V., E.J. Temeles, and W.J. Kress. 2012. Territorial fidelity to nectar sources by Purple-throated Caribs, Eulampis jugularis. Wilson Journal of Ornithology 124:81–86.—First record of territorial site-fidelity across multiple years by Purple-throated Caribs on St. Kitts, Dominica, and St. Vincent. Males remained near patches of their main nectar resources even when they were not in flower. E-mail: vinitagowda@gmail.com.

Jirinec, V., B.R. Campos, and M.D. Johnson. 2011. Roosting behaviour of a migratory songbird on Jamaican coffee farms: landscape composition may affect delivery of an ecosystem service. Bird Conservation International 21:353–361.—Nocturnal tracking revealed Black-throated Blue Warblers (Setophaga caerulescens) moved outside diurnal foraging ranges on the farms to roost in forested habitat patches, sometimes up to 1 km away. These findings reflect the ecological connectivity between coffee habitats and the adjacent landscape. E-mail: vj2@humboldt.edu.

Juhant, M.A. 2012. Where to watch raptor migration in the Caribbean. Neotropical Birding 11:4–15.—E-mail: matias_juhant@yahoo.com.ar.

Kennedy, C.M., E.H. Campbell Grant, M.C. Neel, W.F. Fagan, and P.P. Marra. 2011. Landscape matrix mediates occupancy dynamics of Neotropical avian insectivores. Ecological Applications 21:1837–1850.—Multi-season occupancy models were used to determine the relative influence of patch area, patch isolation, within-patch vegetation structure, and landscape matrix on occupancy dynamics of nine Neotropical insectivorous birds in 99 forest patches embedded in four matrix types (agriculture, suburban development, bauxite mining, and forest) in central Jamaica. Within-patch vegetation structure and the matrix type between patches were more important than patch area and patch isolation in determining local colonization and local extinction probabilities, and the effects of patch area, isolation, and vegetation structure on occupancy dynamics tended to be matrix and species dependent. E-mail: cmk6@umd.edu.

Kirwan, G.M. 2012. Jamaica - “the fairest island.” Neotropical Birding 11:47–55.—E-mail: GMKirwan@aol.com.


Latta, S.C. 2012. Avian research in the Caribbean: past contributions and current priorities. Journal of Field Ornithology 83:107–121.—E-mail: steven.latta@aviary.org.

Lefevre, K.L., S. Sharma, and F.H. Rodd. 2012. Moderate human disturbance of rain forest alters composition of fruiting plant and bird communities. Biotropica 44:427–436.—On Tobago, seemingly moderate human disturbance has led to substantial changes in the plant and bird assemblages of the rainforest, underscoring the impact of even moderate activity on community composition. E-mail: k.lefevre@alumni.utoronto.ca.

Longrich, N.R., and S.L. Olson. 2011. The bizarre wing of the Jamaican flightless ibis Xenicibis xymipthecus: a unique vertebrate adaptation. Proceedings of the Royal Society B 278:2333–2337.—Fossil evidence is presented showing a radically different metacarpus that is elongated and grossly inflated with extremely thick walls. The authors suggest that this bizarre morphology of the wing was used as a club, perhaps in intraspecific battles. E-mail: nicholas.longrich@yale.edu.

Mathys, B.A. 2011. First record of Aplomado Falcon (Falco femoralis) for the West Indies. Wilson Journal of Ornithology 123:179–186.—E-mail: blake.mathys@stockton.edu.

Monceau, K., R. Wattier, F.-X. Dechaume-Moncharmont, S. Motreuil, and F. Cézilly. 2011. Territoriality versus flocking in the Zenaida Dove (Zenaida aurita): resource polymorphism revisited using morphological and genetic analyses. Auk 128:15–25.—The term resource polymorphism refers to the existence of alternative phenotypes in relation to resource use. On Barbados, although Zenaida Doves usually defend year-round territories, birds can also be observed foraging at seed-storage sites in large flocks with little aggression. It has been suggested that this represents a case of resource polymorphism driven by competition for territories. This paper uses new data to revisit the evidence for resource polymorphism in Zenaida Doves on Barbados, but overall the existence of resource polymorphism is questioned. E-mail: karine.monceau@u-bourgogne.fr.

Mones Espin, R., and L. Garcia Rivera. 2010. First breeding record of Black Swift Cypseloides niger in Cuba. Cotinga 32:146–147.—E-mail: montesninin@ups.perla.inf.cu.

Pérez Mena, E.E., and E.C. Mora. 2011. Geographic song variation in the non-oscine Cuban Tody (Todus multicolor). Wilson Journal of Ornithology 123:76–84.—Cuban Todies emitted three types of sounds across the Cuban archipelago. Evidence of geographic variation was found with toadies grouped into two main clusters corresponding to western and eastern Cuba. This geographic song variation may indicate genetic differences in this sedentary forest bird, and the existence of two “incipient species” of toadies in Cuba. E-mail: jrrubio@infomed.sld.cu.


ican Redstart. Partially based on data from Jamaica, results suggest that the process of sexual selection may be influenced by events interacting throughout the annual cycle. E-mail: joseph_smith@tnc.org.

Ricklefs, R.E., and E. Bermingham. 2007. The causes of evolutionary radiations in archipelagoes: passerine birds in the Lesser Antilles. American Naturalist 169:285–297.—Passerine avifaunas of the Hawaiian and Galapagos archipelagoes, which have supported well-known radiations of birds, are compared with those of the Lesser Antilles, which have not. Analysis of genetic divergence among island populations in the Lesser Antilles reveals evidence of both prolonged independent evolution and re-expansion of differentiated island populations through the archipelago but little evidence of secondary sympatry of divergent genetic lineages. E-mail: ricklefs@umsl.edu.

Rockwell, S.M., C.I. Bocetti, and P.P. Marra. 2012. Carry-over effects of winter climate on spring arrival date and reproductive success in an endangered migratory bird, Kirtland’s Warbler (Setophaga kirtlandii). Auk 129:744–752.—Males arrive on breeding grounds later following drier winters, and first-time breeders are more sensitive to changes in rainfall on the wintering grounds than experienced adults. Regardless of age, drier winters and delayed arrival and nest initiation are significantly associated with fewer offspring fledged. E-mail: rockwell@umd.edu.

Sly, N.D., A.K. Townsend, C.C. Rimmer, J.M. Townsend, S.C. Latta, and I.J. Lovette. 2011. Ancient islands and modern invasions: disparate phylogeographic histories among Hispaniola’s endemic birds. Molecular Ecology 20:5012–5024.—Multilocus comparative phylogeography techniques are used to examine the pattern and history of divergence in 11 endemic birds representing potential within-island speciation events. Phylogeographic divergence within or between closely related species was correlated with the likely distribution of ancient sea barriers that once divided Hispaniola into several smaller paleo-islands, and no evidence was found that ecological or topographical complexity generated diversity, either by creating open niches or by restricting long-term gene flow. E-mail: nds22@cornell.edu.

Smith, J.A.M., L.R. Reitsma, and P.P. Marra. 2011. Influence of moisture and food supply on the movement dynamics of a non-breeding migratory bird (Parkeia noveboracensis) in a seasonal landscape. Auk 128:43–52.—Northern Waterthrushes (Parkeia noveboracensis) were radio-tracked in four habitats in Puerto Rico during two winters to determine the ecological determinants of diurnal space use and overwinter site-persistence. The primary determinants of movement probability were moisture and food availability on each bird’s home range. E-mail: joseph_smith@tnc.org.

Smith, J.A.M., L.R. Reitsma, and P.P. Marra. 2011. Multiple space-use strategies and their divergent consequences in a nonbreeding migratory bird (Parkeia noveboracensis). Auk 128:53–60.—Relationships among space-use patterns, home-range attributes, and individual characteristics of Northern Waterthrush were investigated to determine the consequences of different space-use strategies for overwinter physical condition. Intraspacific competition played an important role in determining where individuals initially and eventually settled, and territoriality, characterized by aggression, site-persistence, and exclusive home ranges, often resulted in benefits, especially for males. E-mail: joseph_smith@tnc.org.

Studds, C.E., T.K. Kyser, and P.P. Marra. 2008. Natal dispersal driven by environmental conditions interacting across the annual cycle of a migratory songbird. Proceedings of the National Academy of Science 105:2929–2933.—Using stable-hydrogen isotope ratios in feathers of American Redstarts captured as immature birds and again as adults, habitat use during the first tropical non-breeding season is shown to interact with latitudinal gradients in spring phenology on the temperate breeding grounds to influence the distance traveled on the initial spring migration and the direction of natal dispersal. In contrast, adult redstarts showed considerable site fidelity between breeding seasons, indicating that environmental conditions did not affect dispersal patterns after the first breeding attempt. E-mail: marrap@si.edu.

Toms, J.D., J. Faaborg, and W.J. Arendt. 2012. Climate change and birds in the forgotten tropics: the importance of tropical dry forests. Ibis 154:632–634.—E-mail: judith.toms@zoho.com.

Townsend, J.M., C.C. Rimmer, A.K. Townsend, and K.P. McFarland. 2011. Sex and age ratios of Bicknell’s Thrush wintering in Hispaniola. Wilson Journal of Ornithology 123:367–372.—The proportion of male Bicknell’s Thrush (Catharus bicknelli) on Hispaniola was 0.64, which is comparable to the known male bias in breeding areas. The proportion of males varied geographically on Hispaniola, suggesting some level of habitat segregation, with males preferentially occupying cloud forest sites characterized by a thick understory of vines and saplings. E-mail: Townsend.jason.m@gmail.com.

Townsend, J.M., C.C. Rimmer, and K.P. McFarland. 2012. Radio-transmitters do not affect seasonal mass change or annual survival of wintering Bicknell’s Thrushes. Journal of Field Ornithology 83:295–301.—Studies of transmitters on Bicknell’s Thrushes wintering in the Dominican Republic indicate that attaching light-weight transmitters (< 5% of body mass) to wintering Bicknell’s Thrushes did not adversely affect either body condition or annual survival. E-mail: Townsend.jason.m@gmail.com.

Townsend, J.M., C.C. Rimmer, K.P. McFarland, and J.E. Goetz. 2012. Site-specific variation in food resources, sex ratios, and body condition of an overwintering migrant songbird. Auk 129:683–690.—Available food resources, sex ratios, and body condition of territorial Bicknell’s Thrushes wintering in the Dominican Republic were studied at two ecologically distinct wet-forest sites. Results suggest that there are sex-specific advantages of wintering in these two habitats and that both are critical to supporting the full demographic structure of Bicknell’s Thrush populations. E-mail: Townsend.jason.m@gmail.com.


ings suggest fragmentation of contiguous forest may benefit the species. E-mail: fvilella@cfr.msstate.edu.

White, R.L., T.J. Baptiste, A. Dornelly, M.N. Morton, M.J. O’Connell, and R.P. Young. 2012. Population responses of the Endangered White-breasted Thrasher Ramphocinclis brachyurus to a tourist development in Saint Lucia – conservation implications from a spatial modelling approach. Bird Conservation International 22:468–485.—A four year dataset (2006–2009) and landscape-scale environmental variables were used to: a) identify, characterize and map spatio-temporal patterns of thrasher encounter rates, b) determine landscape-scale environmental variables that influence such patterns, and c) produce an island-wide predictive map of potentially suitable habitat. Findings suggest that it is vital that patches of suitable dry forest adjacent to the tourist development are protected and contiguous natural habitat inside the tourist development is preserved. E-mail: rlw22@kent.ac.uk.

Wiancko, E., E. Nol, A. Parada, and D.M. Burke. 2011. Landbird richness and abundance in three coastal habitats near resorts in Cayo Coco, Cuba. Condor 113:41–51.—E-mail: ewiancko@yahoo.ca.
